

The following Listing of the Claims will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

1-60. Cancelled

70. (Previously Amended) An isolated receptor which binds nucleotides, wherein said receptor comprises an amino acid sequence as shown in SEQ ID NO: 2.

71-73. (Cancelled)

74. (Previously Amended) An isolated nucleic acid molecule encoding the receptor according to claim 70 or a complement thereof.

75. (Previously Amended) The isolated nucleic acid molecule of Claim 74, wherein said nucleic acid molecule is DNA.

76. (Original) The nucleic acid molecule of Claim 74, wherein said nucleic acid molecule has the sequence shown in SEQ ID NO: 1.

77. (Original) A recombinant vector comprising the nucleic acid molecule of Claim 74.

78. (Presently Amended) [A] An isolated host cell comprising the vector of Claim 77.

79. (Original) The host cell of Claim 78, wherein said cell is selected from the group consisting of COS-7, LM(tk-), NIH-3T3 and 1321N1.

80. (Previously Amended) An antisense probe having a sequence fully complementary to an isolated nucleic acid molecule as shown in SEQ ID NO: 1.

81-83. (Withdrawn from consideration)

84. (Previously Amended) A method for determining whether a ligand can activate a receptor which binds nucleotides, wherein said receptor has an amino acid sequence as shown in SEQ ID NO: 2, comprising the steps of:

preparing an extract from cells expressing the receptor;
isolating a membrane fraction from said extract;
contacting said membrane fraction with said ligand; and
assaying said membrane fraction for increased receptor activity, wherein increased activity indicates that said ligand is an activator of said receptor.

85-88. Withdrawn from consideration

89. (Presently Amended) A method for determining whether a ligand can specifically bind to a receptor having a preference for pyrimidine nucleotides over purine nucleotides, wherein said receptor has an amino acid sequence as shown in SEQ ID NO: 2, comprising the steps of:

preparing a cell which expresses the receptor;
contacting said cell with said ligand; and
[assaying the activity of said receptor, wherein increased activity indicates that said ligand is an activator of said receptor] detecting the presence of any such ligand bound specifically to said receptor, thereby determining if the ligand can specifically bind said receptor.

90. Withdrawn from consideration.

91-92. Cancelled.

93. (Original) An isolated nucleic acid molecule comprising the nucleic acid sequence shown in SEQ ID NO: 1.

94. (New) A host cell comprising the vector of Claim 77, wherein said host cell is comprised by a transgenic non-human mammal.